



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,023	11/19/2003	Raanan Liebermann	03-125	8805

34704 7590 01/25/2008
BACHMAN & LAPOINTE, P.C.
900 CHAPEL STREET
SUITE 1201
NEW HAVEN, CT 06510

EXAMINER

NGUYEN, BINH AN DUC

ART UNIT	PAPER NUMBER
----------	--------------

3714

MAIL DATE	DELIVERY MODE
-----------	---------------

01/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/718,023

Applicant(s)

LIEBERMANN, RAANAN

Examiner

Binh-An D. Nguyen

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36,39-44 and 46-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36,39-44 and 46-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413),
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Request of Continued Examination filed October 26, 2007 has been approved, therefore, the Amendment filed September 24, 2007 is hereby considered.. According to the Amendment, claims 4, 8, 26, 35, 36, 42, 48, and 57 have been amended, and claims 37 and 38 have been canceled. Currently, claims 1-36, 39-44 and 46-70 are pending in the application. Acknowledgment has been made.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the amended limitation of "providing information about said visual images to said handicap person" is vague and indefinite since it is unclear how the information of the visual images being collected in order to provide to the handicap person.

Regarding claims 35-38, it is unclear how data from such groups are being analyzed or interpreted from the source in order to provide it to the handicapped person.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-9, 14, 15, 19, 20, 22-27, 42, 43, 46-49, and 53-58 rejected under 35 U.S.C. 102(b) as being anticipated by Lynt et al. (5,636,038).

Referring to claim 1 Lynt et al. teaches method for communicating visual images to a handicapped person, said method comprising the steps of: providing at least one device for physically transmitting information to said handicapped person (Figs.1, 4)(1:30-45; 1:58-2:14); providing information about said visual images to said handicapped person (2:29-44; 3:23-66); and said information providing step comprising delivering a key word, *e.g., using tactile display to output Braille character* (6:7-26), describing a portion of a visual image to said handicapped person using said at least one device (3:47-50; 6:4-26).

Referring to claim 42 Lynt et al. teaches a system for communicating visual images to a handicapped person, said system comprising: at least one device (Figs.1, 4)(1:30-45) for physically transmitting information about said visual image to said handicapped person, *e.g., using image identification and Braille representation* (6:4-26); and said at least one device including means for delivering a key word to said

Art Unit: 3714

handicapped person (2:29-44; 3:47-50; 6:4-26), wherein said at least one device further comprises means for delivering at least one physical input describing a dynamic element associated with said visual image to a palm of said handicapped person, *e.g., using sonar and/or radar imaging to "see" through fog to alert the person to objects ahead through the tactile representation on the tactile display (6:27-32).*

Referring to claims 3, 27, and 58 Lynt et al. teaches delivering said key word in Braille form to a body part of said handicapped person (5:45-53; 6:15-19):

Referring to claims 4 and 43 Lynt et al. teaches transmitting at least one physical input describing a dynamic element to a palm of said handicapped person (3:36-66; 5:15-34).

Referring to claims 5-7, 46, and 47 Lynt et al. teaches transmitting a plurality of successive elements describing a motion to said palm of said handicapped person; transmitting a continuance signal to said palm of said handicapped person to indicate continuance of said motion; and wherein said continuance signal transmitting step comprises transmitting said signal in the form of at least one vibration or impact on a body part (3:36-66; 5:15-34).

Referring to claims 8, 9, 48, and 49, the limitations of delivering information about a musical background to said handicapped person; and wherein said musical background delivering information comprises transmitting at least one of long and short physical impacts to a body part of said handicapped person are inherent from Lynt et al.'s teaching of processing and delivering auditory information to the handicapped person (2:15-27; 2:50-60; 3:32-35, 47-50; 4:40-42, 53-59).

Referring to claims 14, 15, 19, and 53-55, the limitations of transmitting information about said visual images to the back of at least one finger of said handicapped person (claims 14, 53); and transmitting information about the character of a person displayed in said visual images through at least one impact to said back of said at least one finger (claims 15, 54); and transmitting information about said visual images to a front portion of at least one finger (claims 19 and 55) are inherent from Lynt et al.'s teaching of the tactile display means would be placed on surface of a portion of the individual's body and the display could be a two dimensional grid in the shape of a hand or finger tip (2:1-6; 3:62-66; 5:19-20).

Referring to claim 20 Lynt et al. teaches transmitting information about a particular group, e.g., any activity detected by the cameras of the image means (1:35-57).

Referring to claim 20 Lynt et al. teaches transmitting information about lighting to said front portion of said at least one finger (1:35-45; 2:7-14; 5:35-44).

Referring to claims 23-25 and 56 Lynt et al. teaches transmitting information about scenery, a place, activity, and different pieces of information about visual images (e.g., detecting traffic lights, traffic patterns, machinery, etc) to said front portion of said at least one finger (5:35-60).

Referring to claims 26 and 57 Lynt et al. teaches transmitting information about a dialogue being spoken associated with said visual image to said handicapped person (6:10-32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 13, 16-18, 21, 28-32, 35, 36, 44, 52, 59-64, and 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynt et al. (5,636,038) in view of Hagle (3,831,296).

Lynt et al. teaches all limitations of claims 1, 14, 15, 19, 20, and 42 above. Lynt et al. does not explicitly teach the limitations of: delivering said key word in Morse code form to said handicapped person via a body part (claims 2, 44); providing said handicapped person with information about a state of reception of a system on which said visual images are displayed (claims 13, 52); dividing said fingers of a hand of said handicapped person into a first group consisting of a pointer finger and a middle finger and into a second group consisting of a ring finger and a pinky and said transmitting step comprises transmitting information about a bad character to one of said fingers of said first group and transmitting information about a good character to one of said fingers of said second group (claim 16); designating one finger of each of said groups for receiving information about a male character and designating one finger of each of said groups for receiving information about a female character (claim 17); transmitting information about an age of a character and a personality of said character to said back of said at least one finger (claim 18); transmitting information about a profession of said

Art Unit: 3714

character to said front portion of said at least one finger (claim 21); using a thumb of said handicapped person to perform control functions (claims 28, 59); using said thumb to perform at least one of call for help, call for person, and ask questions (claim 29); using said thumb to receive information about at least one of safety alerts, general alerts, and general information (claim 30); transmitting information about at least one of female representation and cross relationships to a front portion of a pinky of said handicapped person (claims 31, 62); transmitting information about an aggression group, a neutral group, and a pleasant group to at least one finger of at least one hand of said handicapped person (claims 35, 67); said aggression group information is transmitted to a finger of a hand (claims 36, 68); said neutral group information is transmitted to a finger of a hand (claims 37, 69); said pleasant group information is transmitted to a finger of a hand (claims 38, 70); said allowing means comprises a thumb cradle (claim 60); said allowing means comprises a thumb sleeve (claim 61); said information transmitting means comprises a pinky cradle (claim 63).

Hagle, however, teaches a method and system for communicating with the blind and deaf person comprises providing said handicapped person with information about a state of reception of a system on which said visual images are displayed (3:8-12); dividing said fingers of a hand of said handicapped person into a first group consisting of a pointer finger and a middle finger (Fig.3, e.g., fingers 39, 35)(3:34-41) and into a second group consisting of a ring finger and a pinky (Fig.3, e.g., fingers 36, 37)(3:24-41); using a thumb of said handicapped person to perform control functions (Figs. 2, 3; 1:40-2:4); using said thumb to perform call for person (1:28-2:12); using said

thumb to receive information about general information (Figs. 2-4; 3:30-64); said allowing means comprises a thumb cradle or a thumb sleeve or a pinky cradle, i.e., gloves (Figs. 1-4; 3:15-29). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Hagle's two-way communication system for the blind and deaf person to the system for converting visual and auditory into tactile representation, as taught by Lynt et al., to come up with a communication system that provide the deaf and blind person total control thus he or she can truly experience and interact with the environment.

With respect to claims 16-18, 21, 31, 35, 36, 62, and 67-70, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, the communication system of Lynt et al. and Hagle, wherein Lynt et al.'s and Hagle's teaching of the handicap person is taught that each location of the simulators represent a different function, is capable of performing the claimed functions of transmitting information about a bad character to one of said fingers of said first group and transmitting information about a good character to one of said fingers of said second group; designating one finger of each of said groups for receiving information about a male character and designating one finger of each of said groups for receiving

Art Unit: 3714

information about a female character; transmitting information about an age of a character and a personality of said character to said back of said at least one finger; transmitting information about a profession of said character to said front portion of said at least one finger; transmitting information about at least one of female representation and cross relationships to a front portion of a pinky of said handicapped person; transmitting information about emotional state to at least one finger of at least one hand of said handicapped person; said aggression group information is transmitted to a finger of a hand; said neutral group information is transmitted to a finger of a hand; and said pleasant group information is transmitted to a finger of a hand.

Referring to claim 2 and 44, Lynt et al., as modified by Hagle, discloses delivering said key word in Morse code form to said handicapped person via a body part to provide alternative communication form for unwritten communication is well known (1:16-20).

Claims 10-12, 39-41, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynt et al. (5,636,038) in view of Butnaru et al. (6,240,392).

Referring to claims 10 & 50, Lynt et al. discloses the method and system according to claims 1 & 42. Lynt et al. does not explicitly disclose transmitting information about a start and an end of a commercial to said handicapped person. However, Butnaru et al. teaches a communication device and method for deaf and mute persons comprising transmitting information about a start and an end of a commercial to said handicapped person (7:36-67). It would have been obvious to a person of ordinary

Art Unit: 3714

skill in the art at the time the invention was made to include transmitting information about a start and an end of a commercial to said hand capped person as disclosed by Butnaru et al, incorporated into Lynt et al. in order for the user to enjoy the television show by allowing the user to distinguish between the actual show and the commercials.

Referring to claims 11 & 51, Lynt et al. discloses the method and system according to claims 1 & 42. Lynt et al. does not explicitly disclose transmitting information about a start of and an end of an emergency broadcast test/test to said handicapped person. However, Butnaru et al. teaches further comprising transmitting information about a start of and an end of an emergency broadcast test/test to said handicapped person (abstract: indicator signals). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include transmitting information about a start of and an end of a emergency broadcast test/test to said handicapped person, as disclosed by Butnaru et al., incorporated into Lynt et al.'s in order to represent dangerous or cautious situations.

Referring to claim 12, Lynt et al. discloses a method according to claim 1. Lynt et al. does not explicitly disclose storing information from a written indicia scrolling across a screen containing said visual image for play at another time. However, Butnaru et al. teaches further comprising storing information from a written indicia scrolling across a screen containing said visual image for play at another time (column 2 lines 41-44 & processor 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include storing information from a written indicia scrolling

across a screen, as disclosed by Butnaru et al., incorporated into Lynt et al.'s in order to display the symbolic representation of the speech data.

Referring to claim 39, Lynt et al. discloses a method according to claim 1. Lynt et al. does not explicitly disclose wherein said visual image is part of a television program containing sound and said handicapped person is a deafblind person and wherein said method further comprises transmitting information about dialogue being spoken by characters on said television program to said deafblind person. However, Butnaru et al. teaches wherein said visual image is part of a television program containing sound (column 1 lines 63-67) and said handicapped person is a deafblind person (column 1 lines 13-16) and wherein said method further comprises transmitting information about dialogue being spoken by characters on said television program to said deafblind person (column 7 lines 36-40).

Referring to claim 40, Lynt et al., as modified by Butnaru et al., discloses wherein said information about said dialogue is transmitted by a keypad contacting fingertips of said deafblind person and said key word is delivered to said deafblind person through a plurality of impacts on a palm of a hand of said deafblind person (Lynt et al.'s 2:29-44; 3:23-66).

Referring to claim 41, Lynt et al., as modified by Butnaru et al., discloses further comprising transmitting information about motion of said visual images to said deafblind person through a plurality of impacts on said palm (Lynt et al.'s 3:47-50; 6:4-26).

Claims 33, 34, 65 & 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynt et al. (5,636,038) in view of Nissen (U.S. 2004/0098256).

Referring to claims 33 & 65, Lynt et al. discloses a method according to claims 1 & 42. Lynt et al. does not explicitly disclose further comprising transmitting information about grammatical tense to at least one finger of at least one hand. However, Nissen teaches further comprising transmitting information about grammatical tense to at least one finger of at least one hand (paragraphs 0014, 0022, 0023, 0079 & 0082). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include transmitting information about grammatical tense to at least one finger of at least one hand, as disclosed by Nissen, incorporated into Lynt et al. in order to have direct communication with or between deafblind people.

Referring to claim 34, Lynt et al., as modified by Nissen, teaches further comprising said transmitting step comprises transmitting grammatical tense information to a back of a pinky of said at least one hand (paragraph 0023).

Response to Arguments

Applicant's arguments filed September 24, 2007 have been fully considered but they are not persuasive.

Applicant argued that Lynt et al. does not teach perform the step of delivering a key word which describes a portion of a visual image to the handicapped person (Applicant's remarks, page 15, last paragraph bridging page 16, line 16; page 18, last paragraph) is deemed not to be persuasive. Lynt et al. teaches providing information

Art Unit: 3714

about said visual images to said handicapped person (2:29-44; 3:23-66); and said information providing step comprising delivering a key word, *e.g., using tactile display to output Braille character (6:7-26)*, describing a portion of a visual image to said handicapped person using said at least one device (3:47-50; 6:4-26). Lynt et al. further teaches *using image identification and Braille representation (6:4-26)*; and *using sonar and/or radar imaging to "see" through fog to alert the person to objects ahead through the tactile representation on the tactile display (6:27-32)*. Thus, Lyn et al. anticipated applicant's claimed invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Janakiraman et al. (2005/0069852) teaches translating emotion to Braille, emoticons and other special symbols.

Challapali (2002/0194006) teaches text to visual speech system and method incorporating facial emotion.

Said et al. (2004/0143430) teaches universal processing system and methods for production of outputs accessible by people with disabilities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh-An D. Nguyen whose telephone number is 571-272-4440. The examiner can normally be reached on Monday-Friday.

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BN

Robert E Pezzuto
Supervisory Patent Examiner
Art Unit 3714



XUAN M. THAI
SUPERVISORY PATENT EXAMINER